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FIG. 1

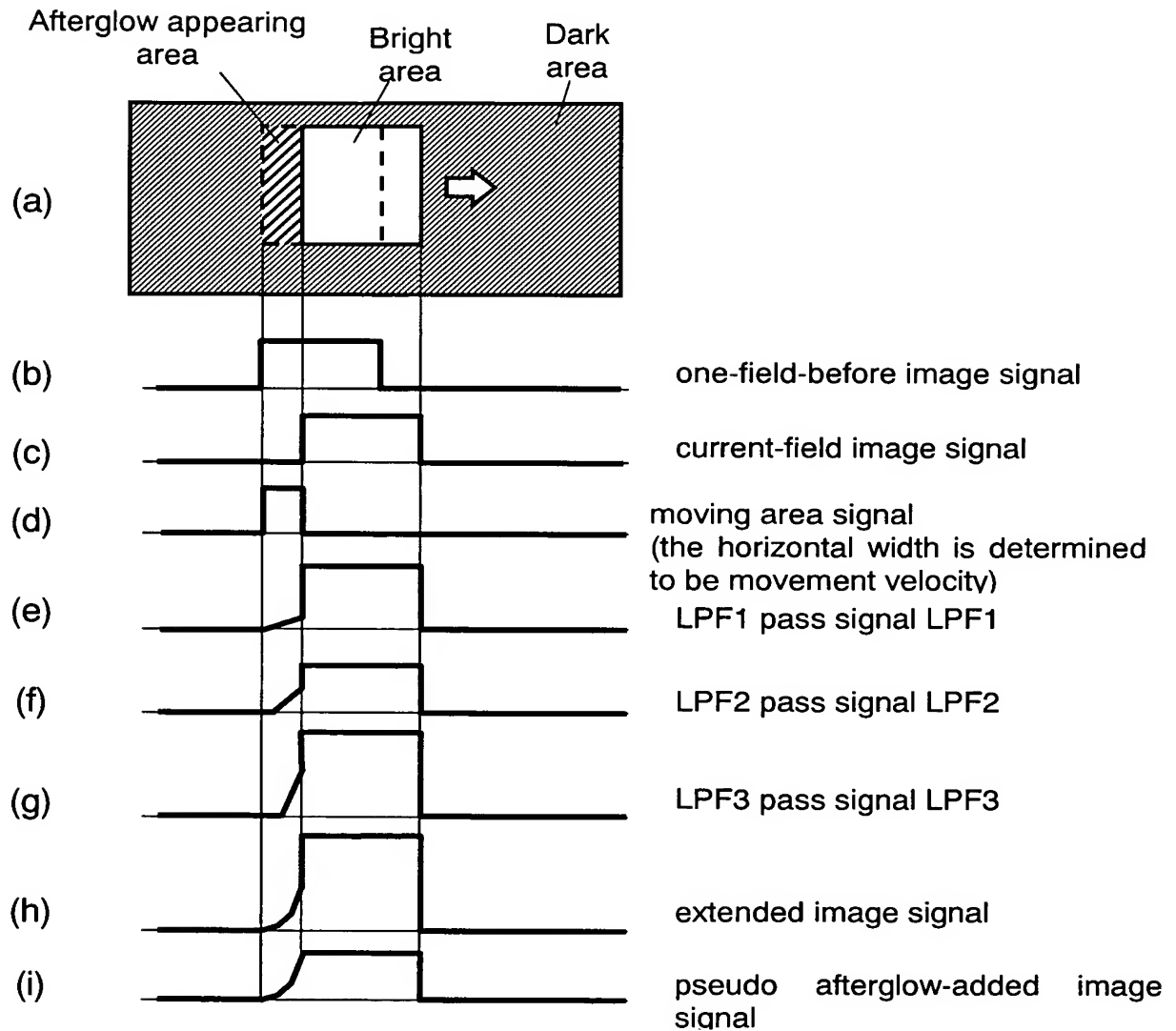
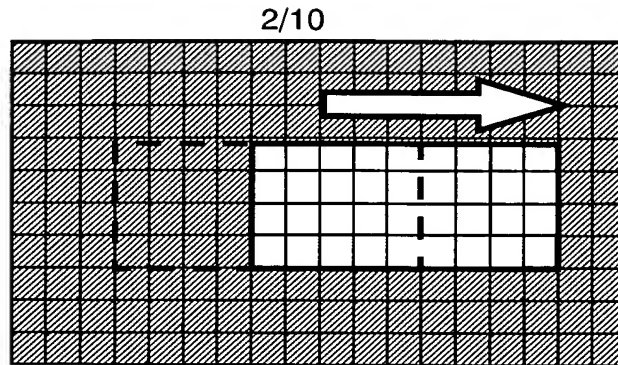


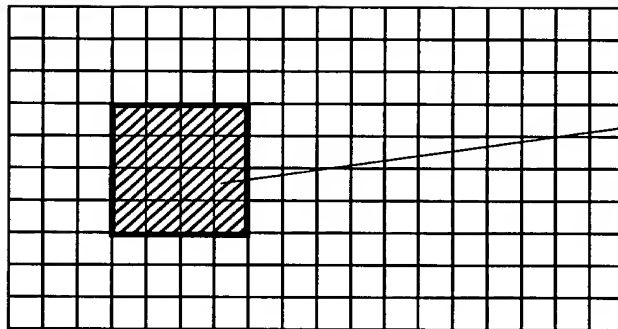
FIG. 2

(a)



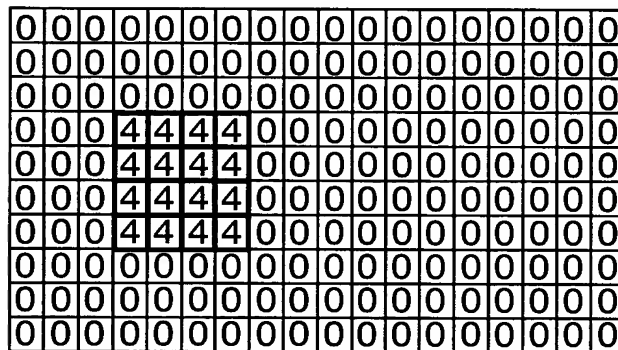
gray levels in the
bright area=100
gray levels in the
dark area=0

(b)

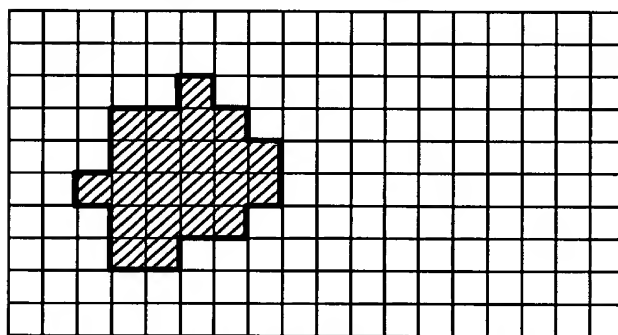


moving area

(c)



(d)



(e)

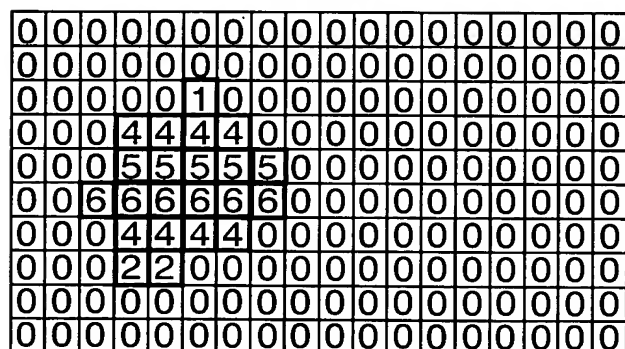
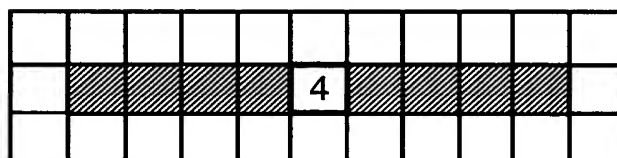


FIG. 3

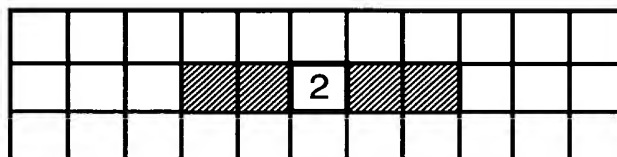
| movement velocity | tap values |
|-------------------|------------|
| 0 | 0 |
| 1 | 1 |
| 2,3,4 | 4 |
| 5,6,7 | 8 |
| 8 ~ | 16 |

FIG. 4

(a)



(b)



(c)

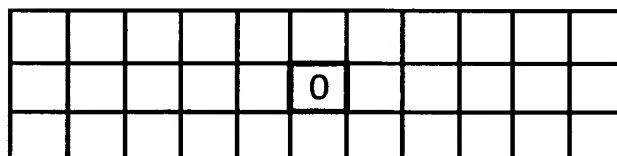


FIG. 5

(a) image signal

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|-----|-----|-----|-----|-----|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 100 | 100 | 100 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 100 | 100 | 100 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 100 | 100 | 100 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 100 | 100 | 100 |

(b) tap value

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 0 |

(c) LPF1

| | | | | | | | | | | | | |
|--------------------|---|---|---|---|----|----|----|----|----|----|----|----|
| tap value x 1 | 0 | 0 | 0 | 6 | 12 | 18 | 25 | 50 | 50 | 50 | 50 | 50 |
| current-field | 0 | 0 | 0 | 6 | 12 | 18 | 25 | 50 | 50 | 50 | 50 | 50 |
| image signal x 0.5 | 0 | 0 | 0 | 6 | 12 | 18 | 25 | 50 | 50 | 50 | 50 | 50 |
| | 0 | 0 | 0 | 6 | 12 | 18 | 25 | 50 | 50 | 50 | 50 | 50 |

(d) LPF2

| | | | | | | | | | | | | |
|------------------|---|---|---|---|---|----|----|-----|-----|-----|-----|-----|
| tap value x 0.5 | 0 | 0 | 0 | 0 | 0 | 25 | 50 | 100 | 100 | 100 | 100 | 100 |
| current-field | 0 | 0 | 0 | 0 | 0 | 25 | 50 | 100 | 100 | 100 | 100 | 100 |
| image signal x 1 | 0 | 0 | 0 | 0 | 0 | 25 | 50 | 100 | 100 | 100 | 100 | 100 |
| | 0 | 0 | 0 | 0 | 0 | 25 | 50 | 100 | 100 | 100 | 100 | 100 |

(e) LPF3

| | | | | | | | | | | | | |
|------------------|---|---|---|---|---|---|-----|-----|-----|-----|-----|-----|
| tap value x 0.25 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 200 | 200 | 200 | 200 | 200 |
| current-field | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 200 | 200 | 200 | 200 | 200 |
| image signal x 2 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 200 | 200 | 200 | 200 | 200 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 200 | 200 | 200 | 200 | 200 |

(f) extended image signal

| | | | | | | | | | | | |
|---|---|---|---|----|----|-----|-----|-----|-----|-----|-----|
| 0 | 0 | 0 | 6 | 12 | 25 | 100 | 200 | 200 | 200 | 200 | 200 |
| 0 | 0 | 0 | 6 | 12 | 25 | 100 | 200 | 200 | 200 | 200 | 200 |
| 0 | 0 | 0 | 6 | 12 | 25 | 100 | 200 | 200 | 200 | 200 | 200 |
| 0 | 0 | 0 | 6 | 12 | 25 | 100 | 200 | 200 | 200 | 200 | 200 |

FIG. 6

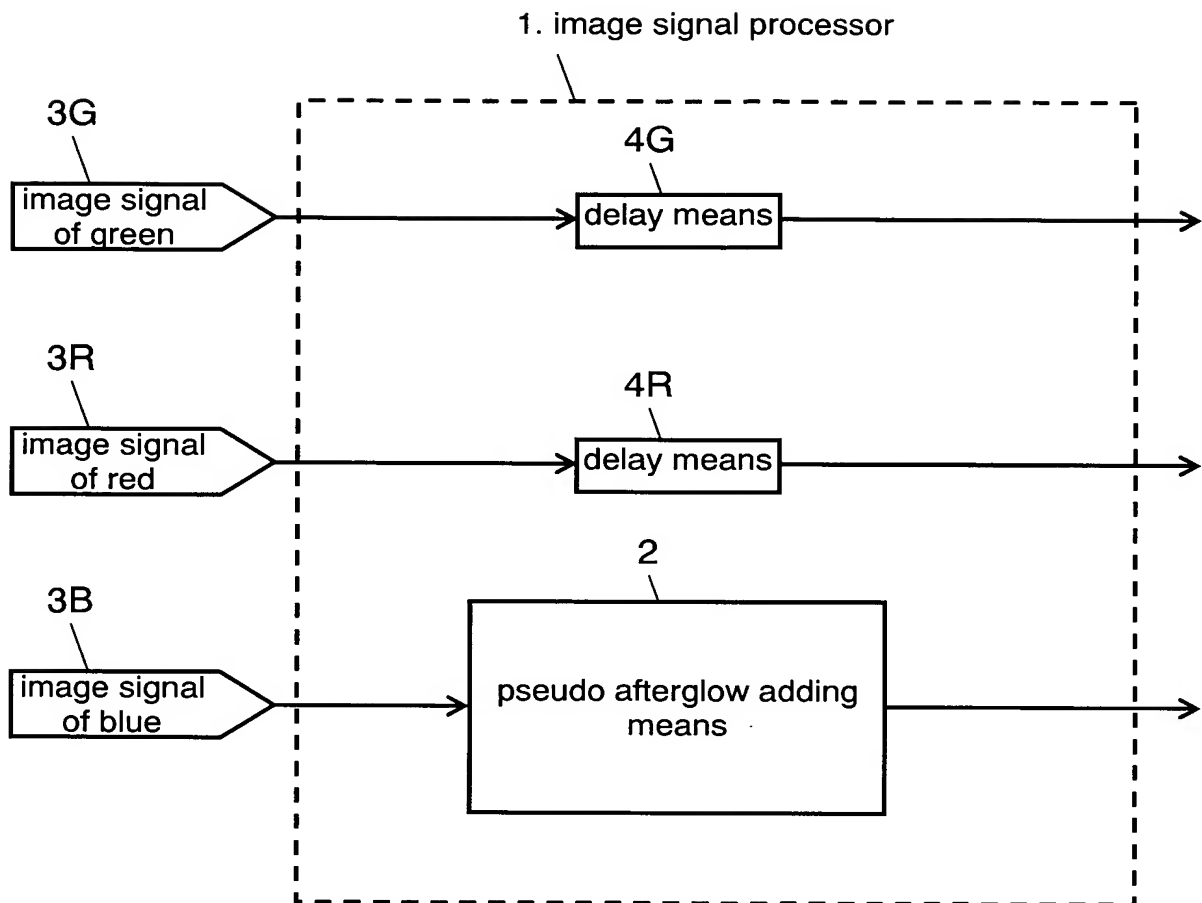


FIG. 7

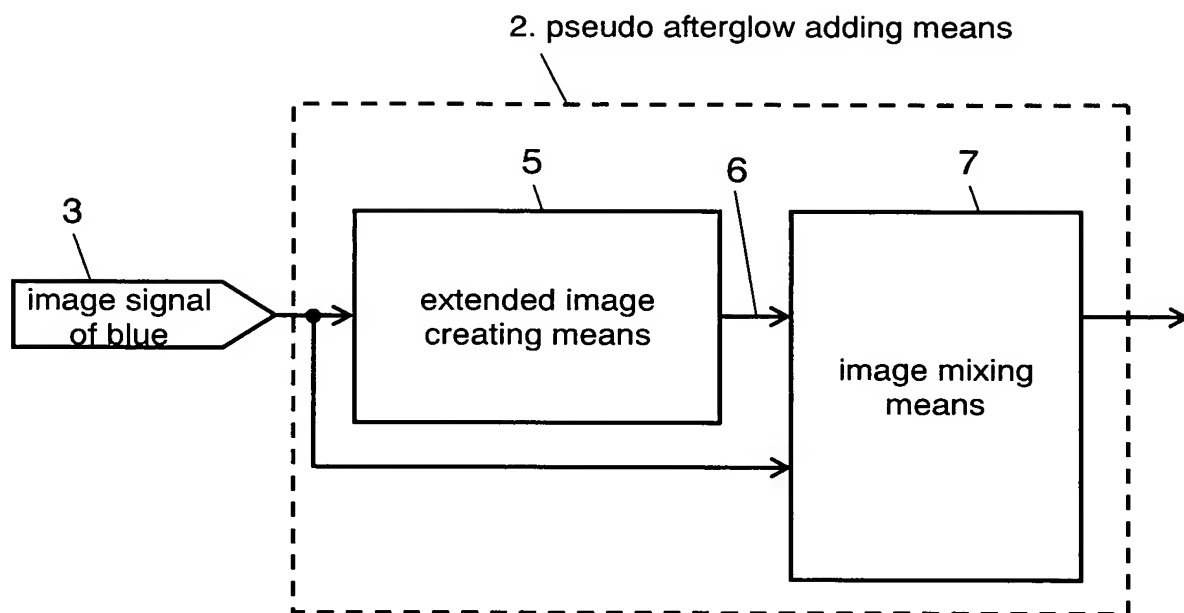
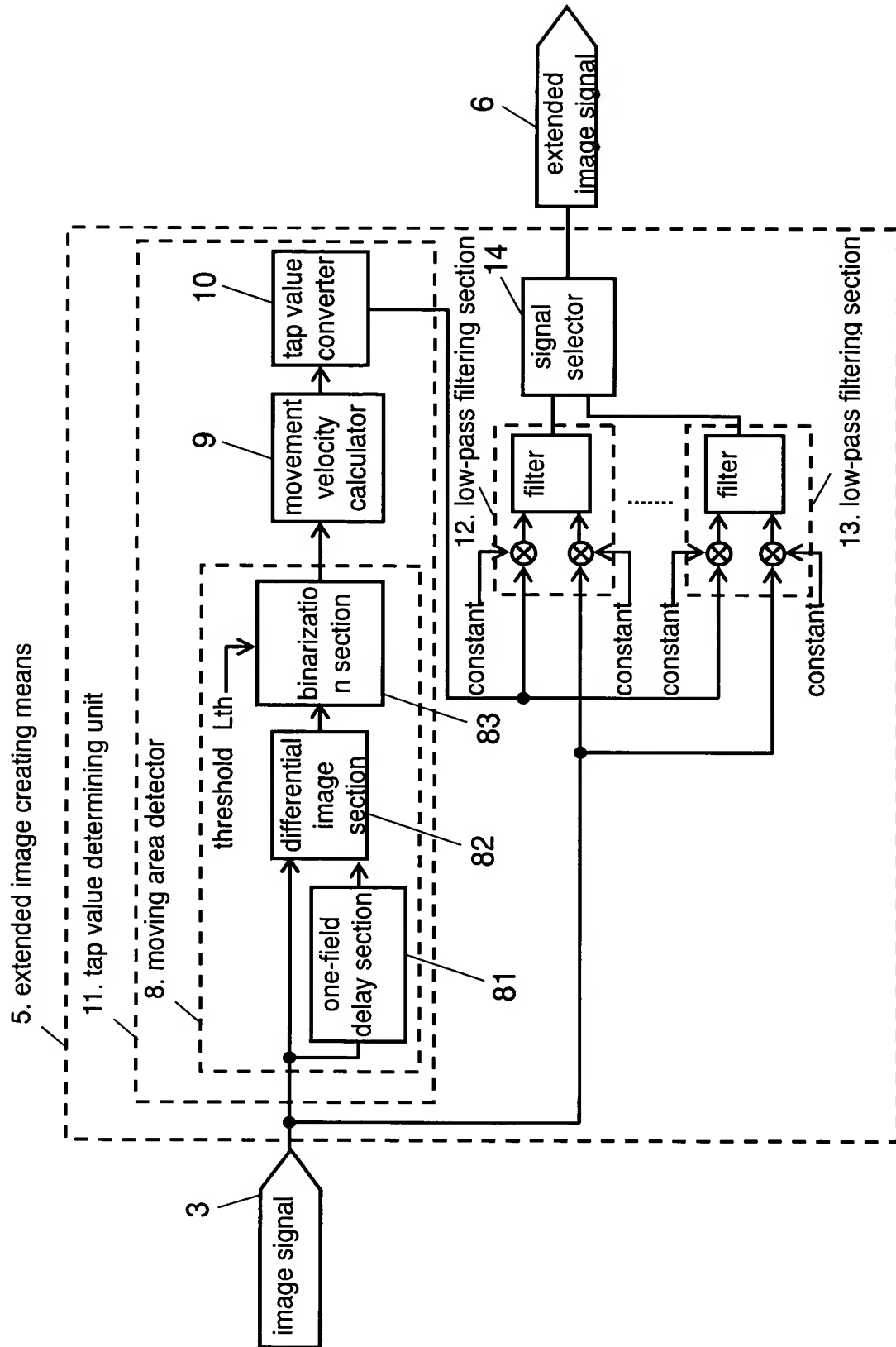
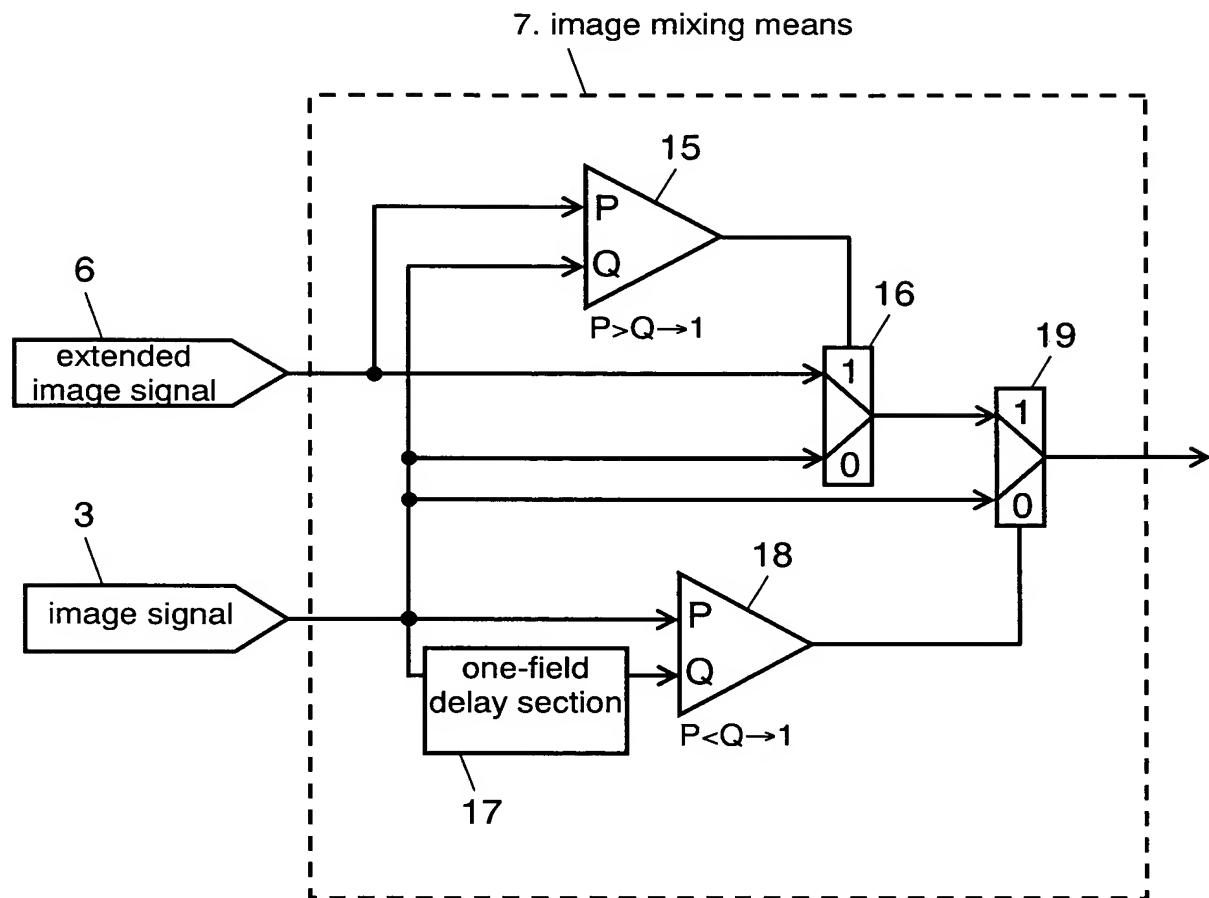


FIG. 8

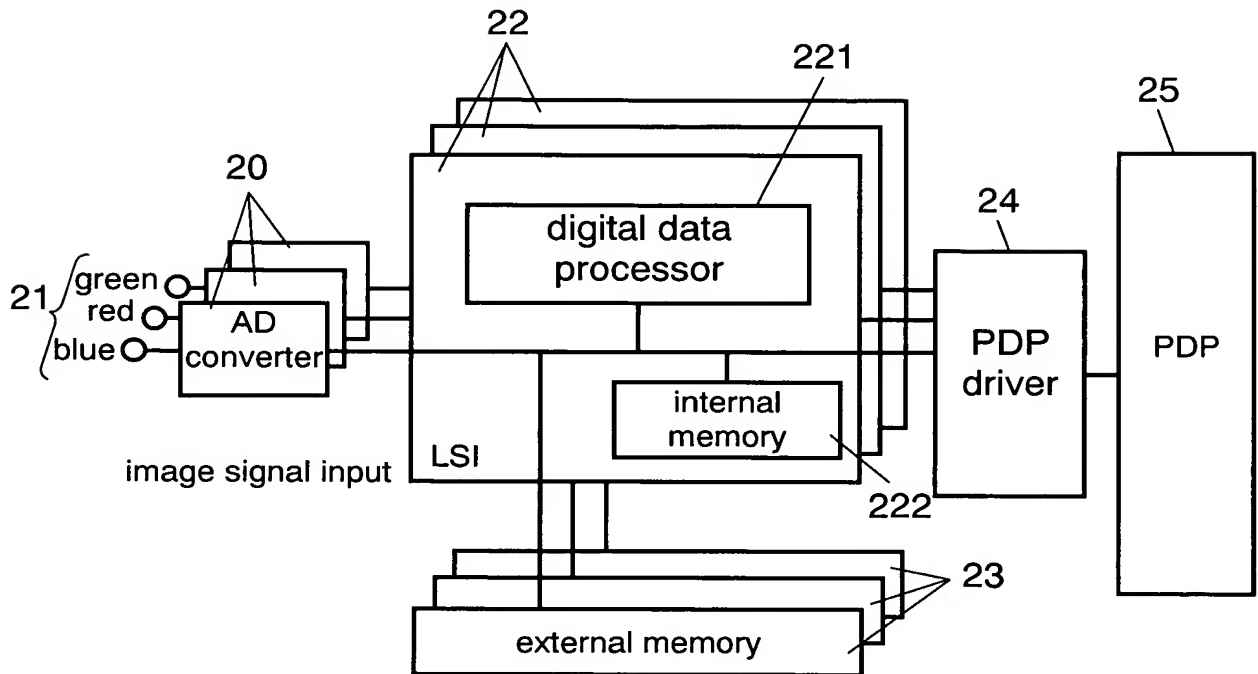


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FIG. 9



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FIG. 10



[Reference marks in the drawings]

- 1: image signal processor
- 2: pseudo afterglow adding means
- 3, 3G, 3R, 3B: image signal
- 4G, 4R: delay means
- 5: extended image creating means
- 6: extended image signal
- 7: image mixing means
- 8: moving area detector
- 9: movement velocity calculator
- 10: tap value converter
- 11: tap value determining unit
- 12, 13: low-pass filtering section
- 14: signal selector
- 81: one-field delay section
- 82: differential image section
- 83: binarization section